wizmart

SFM

Synchronized Function Module

Listed

The Synchronized Function Module (SFM) is designed to allow Wizmart Non-Addressable Horns, Strobes and Audible/Visible units to be put on the same Notification Appliance Circuit (NAC). This allows the silencing of the Horns without deactivation of the Strobes. The SFM connects to and derives power from a reverse polarity Notification Appliance Circuit (NAC). It activates the visible appliances when the NAC is in the forward polarity (alarm state), and uses energy from this circuit to power the attached Non-Addressable (or other) notification appliances. When the NAC is in the reverse polarity, or supervision state, the SFM is off, and connects the NAC to the units wiring for traditional appliance supervision. The SFM uses a 2nd circuit from the panel to control operation of audible appliances connected to the SFM output. The SFM also supports Class A wiring configurations, and synchronization across multiple Non-Addressable NACs.

Key Features

SFM requires a signal from the FACP NAC to control horns and strobes. **SFM** uses these circuits to power attached Notification Appliances. A 1 Hz pulse on the NAC synchronizes the flashing of Strobes. The Horn on SFM enabled devices are controlled via signals transmitted from the SFM O/P during certain strobe synchronization pulses. SFM has four optional signalling modes.

The **NAC Input** connection on the SFM provides power for this device and attached NAC appliances. The NAC input must be driven by a fully functioning reverse polarity non-coded NAC output from the FACP or DC power. The module is not powered when this circuit is in the reverse polarity state, if powered by FACP, supervision of SFM wiring is performed; if powered by external DC power, SFM rather than FACP supervise the SFM wiring.

The **Horn Input** is driven by a non-coded FACP output. A positive voltage commands the horn appliances attached to the module's NAC OUT wiring to operate. A reverse polarity voltage, or a zero voltage condition, will turns the horn appliances off.

The **Sync Input** is driven by a non-coded FACP output. A positive voltage commands the Strobe appliances attached to the module's NAC OUT wiring to operate. A reverse polarity voltage, or a zero voltage condition, turns the Strobe appliance off and SFM will be into supervision mode, it outputs reverse polarity voltage. Groups of SFMs can synchronize appliances across multiple NACs. Each SFM has a **Multi-Sync** port with input and an output connection. These ports can be daisy chained together. The first SFM in the chain is set via DIP switch to be the Multi-Sync "master", it generates the sync signals. The other SFMs have their DIP switches set for slave operation: they follow the sync signals.

Supervision of SFM wiring is performed by the attached FACP (if powered by FACP), or by itself (if powered by external DC supply). The NAC output from the panel connected to the NAC IN monitors the wiring through the SFM and out to the EOL resistor after the last appliance on the Non-Addressable NAC. If use external power supply to SFM, FACP is not in alarm, SFM will monitor the wiring through the EOL resistor after the last appliance, which will not be transmitted to FACP. The SFM supports **Class A** wire run configurations extending from the module, through the appliances, and back to the EOL resistor at the SFM Class A. The EOLR at the Class A terminal is internal to the SFM.

TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE	16 ~ 33 V DC
OPERATING CURRENT	50 mA, 70mA @ Class A 24 V DC
ALARM CURRENT @ 24V DC	30 mA
CIRCUIT LOAD	4.0 Amp maximum
TERMINAL WIRING	18AWG ~ 12AWG (0.82 mm2 ~3.31 mm2)
OPERATING TEMPERATURE	0 °C ~ +50 °C
OPERATING HUMIDITY	10 % ~ 93 % RH, non-condensing at 38 °C
DIMENSIONS (w x h x d)	(100 × 100 × 30) mm
INGRESS PROTECTION RATING	IP-22

ORDER CODE

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